

Message

From: Shuster, Kenneth [Shuster.Kenneth@epa.gov]
Sent: 6/11/2015 6:22:07 PM
To: Galbraith, Michael [Galbraith.Michael@epa.gov]; Lesser, Ben [Lesser.Ben@epa.gov]; Gaines, Jeff [Gaines.Jeff@epa.gov]; Lipka, Michelle [Lipka.Michelle@epa.gov]
Subject: FW: National Subpart X (Miscellaneous Units) Workgroup Conf Call
Attachments: SCWO PermittingSynopsis for VA-DEQ.PDF; Energetic pumping flyer.pdf; AOTs_10 Final Manuscript.pdf

Interesting reports on SCWO.

From: Scott, Ashby (DEQ) [mailto:Ashby.Scott@deq.virginia.gov]
Sent: Thursday, June 11, 2015 1:59 PM
To: Singh, Harbhajan
Cc: Shuster, Kenneth; Anderson, Meredith; Norman, Michael
Subject: RE: National Subpart X (Miscellaneous Units) Workgroup Conf Call

Harbhajan,

When Leslie and I spoke with Mr. Ordway at General Atomics this week he said that since the system had not been tested on finished propellant mixtures they were basing their removal efficiencies on kinetic modeling from raw propellant material and mass balances of the finished material and those modeled efficiencies were comparable to what they'd seen on active units. I've attached some more material Mr. Ordway sent us regarding the SWCO system so hopefully that will answer some questions.

There are a few different hydrolysis based treatment methods which we've identified that look fairly promising. The common problem we've been seeing is DoD seemed to be actively looking at alternatives around 2005, since they knew that open burning wouldn't be tolerated but for so long, and then the research was abandoned before anything passed a pilot scale project could be completed. It's frustrating from a regulator side since we have to demonstrate that these methods are commercially viable in order to press for facilities to replace the burn pans.

At some point during the permitting process of the three OB/OD permits in VA we'll probably need EPA to make a determination on whether these alternative treatments are viable and if we can then sunset the current permits while the systems are being installed.

Thanks,
Ashby

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From: Singh, Harbhajan [mailto:Singh.Harbhajan@epa.gov]
Sent: Thursday, June 11, 2015 1:38 PM
To: Scott, Ashby (DEQ)

Cc: Shuster, Kenneth; Anderson, Meredith; Norman, Michael
Subject: RE: National Subpart X (Miscellaneous Units) Workgroup Conf Call

Ashby,

I am not a member of Subpart X (Miscellaneous Units) Workgroup and also haven't attended the today's Subpart X WG Conference call. I am familiar with the applicability of Super Critical Water Oxidation and have presented a Schematic Flow Diagram for its process along with removal efficiencies during our internal meeting at Region 4. I looked into the attached short presentation on Super Critical Water Oxidation and appears to be favorable. This technology is promising, but is applied infrequently at the RCRA sites, but Region 4 hasn't evaluated this technology at sites herein. My recommendation is that we must ask the consultants/facilities to submit a detailed design of the process along with removal efficiencies and a similar case history of any site.

You are welcome if you need the EPA Region 4 assistance to evaluate the applicability of Super Critical Water Oxidation at your site or any other related information.

Thank you.

Ken: Will you please make me a member of Subpart X (Miscellaneous Units) Workgroup?

Harbhajan

Harbhajan Singh
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From: Housley, Denise

Sent: Wednesday, June 10, 2015 1:22 PM

To: Allison, John; Anderson, Meredith; Bastek, Brian; Gaston, Willie; Gates, Kim; Hardegree, Wesley; Holtzclaw, Brian; Housley, Denise; Johnston, John E.; McCurry, Doug; McLaughlin, Amy; Merizalde, Carlos; Morris, Robert; Shipley, Anita; Singh, Harbhajan; Smith, Jim; Verduin, Jeanette

Cc: Bowers, Joe; carla_brown@deq.state.ms.us; Bud.mccarty@ncdenr.gov

Subject: National Subpart X (Miscellaneous Units) Workgroup Conf Call

From: Shuster, Kenneth

Sent: Wednesday, June 10, 2015 1:10 PM

To: Shuster, Kenneth; Galbraith, Michael; Lesser, Ben; Lipka, Michelle; Gaines, Jeff; King, Toshia; Abdul-Malik, Norma; Gerhard, Sasha; Svizzero, Michael; Hansen, Gail; Kohler, Amanda; Colon, Lilybeth; Yee, Stephen; Everett, Adolph; Azzam, Nidal; Park, Andy; Brogard, John; Ferreira, Gina; Bellina, Andrew; Bosque, Adalberto; Salgado, Angel; Negron, Luis; Matyskiela, Linda; Kinslow, Sara; Housley, Denise; Crosby-Vega, Terri; McKeePerez, Nancy; Zapata, Cesar; Gilliland, Houston; Watson, Sarah; Blough, James; Ramanauskas, Peter; Lee, Jae; Hendrickson, Charles; Fruitwala, Kishor; Herstowski, Ken; Brown, Terry; Newland, Jesse; Morlock, Nancy; Zabaneh, Mahfouz; Gross, Barbara; Lau.Nathan@epa.gov; Meyer, Linda; Palumbo, Janice; John.Scott@dep.state.nj.us; Zafar.Billah@dep.state.nj.us; Jennifer.Meyer@dep.state.nj.us; Thomas.Giordano@dep.nj.gov; Anthony.Fontana@dep.nkj.gov; michelle.ching@dec.ny.gov; tjkillie_gw.dec.state.ny.us; Diane McDaniel; Oscar

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Subject: Subp X WG Conf Call

The next Subp X WG Conference Call is tomorrow 6/11/15, 12n-1:30pm EST. Please send me any additional agenda items.

Dial-In Number:
Conference Code:

Conference Line/Code / Ex. 6

FYI: Attached is an updated list of Subp X WG members, including those wanting to be on the distribution list.

Here is the Agenda so far:

- 1) HQ Update {Ken Shuster}
- 2) Leslie Romanchik and I just had a discussion with Mr. David Ordway at General Atomics about their Super Critical Water Oxidation system which has been designed to treat energetic wastes among other waste streams. I'd like to see if any of the other states have evaluated this or similar treatment technologies when performing the alternative treatment technology review for OB/OD permits and if this technology looked promising. Attached is the short presentation Mr. Ordway provided to us which explains the system and what waste streams it can treat. [Ashby Scott, Hazardous Waste Permit Writer, Department of Environmental Quality, 629 East Main Street, Richmond, VA 23218 Phone: 804-698-4467 [Ashby.Scott@deq.virginia.gov](#)]

Ken Shuster
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